

shi compare chimpanzee tool-use and material-use between two nearby populations of chimpanzees in West Africa. Boesch applies three approaches to investigate the causes of behavioral variation among chimpanzee populations: the ecological, transmission mechanism, and regional innovation approaches.

The evolution of cognitive capacity is another major theme. Byrne argues that gorillas are not dull compared to chimpanzees or orangutans because gorilla feeding and social strategies provide enough complexity to act as selective factors for cognitive capacities. Langer proposes that heterochronic evolution in the ontogeny of cognitive domains explains differences in the cognitive capacities of monkeys, apes, and humans. Parker evaluates evidence for not only the evolution of imitation, but also the evolution of teaching. Call and Tomasello review the effects of artificial environments on ape cognitive development to argue that apes exhibit different skills as a function of human contact.

A central question for anthropologists, and an underlying theme in several contributed chapters, is how and when we can apply the term "culture" to nonhuman apes. Culture and "culture" appear in several papers, three times in titles. The papers by Boesch, Parker, and Russon take up the challenge of formulating comparative definitions of culture. Russon also proposes an explanation for why only chimpanzees, and possibly bonobos, show regional cultures despite the similar cognitive abilities of all the great apes.

This volume keenly reflects the rapidly expanding research on cognitive capacity among nonhuman primates. The papers cover a wide range of topics, yet no paper is out of place or redundant. Readers often pick and choose the papers to read in edited volumes. This is one edited volume that they may find themselves reading entirely.

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DEMONIC MALES: APES AND THE ORIGINS OF HUMAN VIOLENCE. By Richard Wrangham and Dale Peterson. Boston: Houghton Mifflin. 1996. 350 pp. ISBN 0-395-69001-3. \$24.95 (cloth).

Demonic Males. It is difficult to imagine a title more deliberately provocative than this for a book that situates the origins and persistence of human violence in an evolutionary context. The compelling prose brings readers into the lives of ruthless, power-hungry apes, simultaneously capturing the imagination and prickling the spine. But it isn't the blood, gore, or sinister strategizing that cause the discomfort. Rather, it is the idea that yet another distinguishing hallmark of humanity, that of our own savagery, is really not so special after all. And with the dark side of our nature so firmly rooted in our primate past comes the chilling prospect that mastering it may be just beyond our control.

Clues to how we might have taken a different evolutionary track, or might still yet do so, are equally unsettling. If only female hominids could have bonded with one another like female bonobos, then we, too, might have the power to exert a calming influence on the aggressive tendencies that the males of our species have unwittingly inherited. If only modern women could be firm about rejecting lucrative sexual exchanges with resource-controlling men, then we could possibly eliminate the winning advantages that male status strivers have managed to gain in the evolutionary game.

The problem, of course, is that human females are every bit as much a product of our biological ancestry as the males we choose as mates. If female hominids didn't bond with one another, it was because the advantages of doing so must have been overshadowed by the disadvantages, just as for contemporary chimpanzees depicted in this volume, where the distribution of fe-

male food resources requires them to forage on their own and precludes opportunities for establishing reliable alliances with other females. The question then becomes whether, with our heightened self-awareness, we can self-consciously override what millions of years of evolutionary history have apparently prepared us to be.

The comparative approach of looking to other nonhuman primates for insights into human behavior has historical roots. Tracing these roots to primates as genetically similar to us as chimpanzees is an obvious course for those seeking to identify appropriate candidates for comparative analyses. Nonetheless, the implication that somehow human females could solve the problem of male violence and aggression seems unjust in a world where, more often than not, women are the unarmed and unlanded members of our species. But science isn't about finding the answers we necessarily want to hear and if comparisons between humans and chimpanzees lead to the connections about male violence and aggression developed in this book, then we must consider the ways in which humans could be different.

Questions like these provide fast-burning fuel for stimulating debates in seminars and discussions about primate and human continuums. They are aided by the powerful natural history accounts, from chimpanzees to hyenas, detailed in this book. Readers already familiar with the scientific literature on the species depicted will find few flaws with the portrayals they encounter

here. *Demonic Males* never claims to represent a complete selection of primate behavioral variation, so readers looking for more extended comparative examples should not be disappointed to find that primates such as lemurs, in which females bond together to dominate males, and the callitrichids, in which females have turned male competition on its head by enlisting males in the burden of infant care and thus realigning male reproductive strategies to coincide with their own, have been left out. Similarly, *Demonic Males* does not delve deeply into the underlying mechanisms that regulate behavioral variation, so readers interested in understanding the basis of sex differences in aggression at this level will need to consult the primary literature cited.

Remembering that this is a book about aggressive tendencies of both the chimpanzee and human variety, and that it courageously tackles head-on some of the most fundamental questions about the primate continuum to which humans belong, should establish its place among other classics on anthropology reading lists for a long time to come. Wrangham and Peterson offer a comparative perspective from which to think about our past, and from which to contemplate—and choose—our future. Ultimately, it is the challenge to make this choice that makes *Demonic Males* such a provocative book, and so worth reading. The availability of a paperback edition makes it even better.

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HUMAN EVOLUTION IN CHINA: A METRIC DESCRIPTION OF THE FOSSILS AND A REVIEW OF THE SITES. By Xinxhi Wu and Frank E. Poirier. New York: Oxford University Press. 1995. 317 pp. ISBN 0-19-507432-7. \$65.00 (cloth).

The publication of this book marks the hopeful beginning of a new era of interna-

tional cooperation among students of hominoid and hominid evolution in China. This thorough account lists all the known sites to have yielded hominid or hominoid fossil specimens. The relevant fossils are described for each site entry and, where available, summaries of the stratigraphy, archaeology, and associated fauna are included. These entries are organized into chapters